II.   AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. – 9. (Canceled)

10. (Currently Amended) A system for sharing source code over a network, comprising:

at least one computer hardware device;

an Integrated Development Environment (IDE), wherein the IDE includes classification-based navigation and content dependent searching for code patterns;

a code pattern classifier for analyzing source code generated on a sharing node in the network to identify a set of code patterns, and for assigning at least one predetermined category to the source code based on the identified set of code patterns, wherein code pattern information that is based on the analysis and assignment is stored in a directory; and

a source code indexer for selectively indexing the source code, a dependent code type, and an associated code type, wherein the source code indexer comprises:

a programming language recognizer for recognizing at least one programming language of the source code analyzing sections of the source code;

a selective code content indexer for indexing relevant portions of the source code based on the at least one programming language, wherein the relevant portions include comments, type names and method names;

a dependency graph indexer for recognizing and indexing <u>at least one</u> ~~a graph of~~ source code <u>dependency</u> ~~dependencies~~ corresponding to the source code;

a code type hierarchy recognizer for recognizing a <u>set of</u> code type hierarchies ~~hierarchy~~ associated with the source code; and

an associated code type indexer for indexing <u>the</u> ~~a set of~~ code types <u>in the recognized set of</u> ~~from the~~ code type <u>hierarchies</u> ~~hierarchy that is associated with the source code~~.

11. (Original) The system of claim 10, further comprising a code sharing notifier for notifying a set of other nodes in the network of the availability of the source code.

12. (Original) The system of claim 10, wherein the code pattern information comprises the set of code patterns, the at least one predetermined category, and an identity of the sharing node.

13. (Canceled).

14. (Original) The system of claim 10, further comprising a system for accessing the source code on a receiving node in the network comprising:

a context classifier for analyzing working code on the receiving node to identify a context of the working code, and for assigning at least one predetermined category to the working code based on the identified context;

a query generator for querying the directory using the at least one predetermined category assigned to the working code;

a category selector for receiving a response to the query from the directory, wherein the response includes the at least one predetermined category assigned to the source code; and

a code pattern requestor for retrieving the source code from the sharing node to the receiving node upon selection of the at least one predetermined category assigned to the source code.

15. (Currently Amended) A <u>computer readable medium storing a</u> program product <s>stored on a recordable medium</s> for sharing source code over a network, which when executed, comprises:

program code for analyzing source code generated on a sharing node in the network to identify a set of code patterns, and for assigning at least one predetermined category to the source code that is based on the identified set of code patterns, wherein code pattern information based on the analysis and assignment is stored in a directory; and

program code for selectively indexing the source code, a dependent code type, and an associated code type, wherein the program code for selectively indexing the source code comprises:

program code for recognizing at least one programming language of the source code;

<u>program code for analyzing sections of the source code;</u>

program code for indexing relevant portions of the source code based on the at least one programming language<u>, wherein the relevant portions include comments, type names and method names</u>;

program code for recognizing and indexing <u>at least one</u> <s>a graph of</s> source code <u>dependency</u> <s>dependencies</s> corresponding to the source code;

program code for recognizing a <u>set of</u> code type <u>hierarchies</u> <s>hierarchy</s> associated with the source code; and

program code for indexing the ~~a set of~~ code types in the recognized set of ~~from the~~ code type hierarchies ~~hierarchy that is associated with the source code~~; and

wherein the program product operates in an Integrated Development Environment (IDE) which includes classification-based navigation and content dependent searching for code patterns.

16. (Original) The program product of claim 15, further comprising program code for notifying a set of other nodes in the network of the availability of the source code.

17. (Original) The program product of claim 15, wherein the code pattern information comprises the set of code patterns, the at least one predetermined category, and an identity of the sharing node.

18. (Canceled).

19. (Original) The program product of claim 15, further comprising program code for accessing the source code on a receiving node in the network comprising:

program code for analyzing working code on the receiving node to identify a context of the working code, and for assigning at least one predetermined category to the working code based on the identified context;

program code for querying the directory using the at least one predetermined category assigned to the working code;

program code for receiving a response to the query from the directory, wherein the response includes the at least one predetermined category assigned to the source code; and

program code for retrieving the source code from the sharing node to the receiving node upon selection of the at least one predetermined category assigned to the source code.

20. – 22. (Canceled)

23. (Currently Amended) A system for selectively indexing source code for sharing over a network, comprising:

at least one computer hardware device;

an Integrated Development Environment (IDE), wherein the IDE includes classification-based navigation and content dependent searching for code patterns;

a programming language recognizer for recognizing at least one programming language of the source code and analyzing sections of the source code;

a selective code content indexer for indexing relevant portions of the source code based on the at least one programming language, wherein the relevant portions include comments, type names and method names;

a dependency graph indexer for recognizing and indexing at least one a graph of source code dependency dependencies corresponding to the source code;

a code type hierarchy recognizer for recognizing a set of code type hierarchies hierarchy associated with the source code; and

an associated code type indexer for indexing the a set of code types in the recognized set of from the code type hierarchies hierarchy that is associated with the source code.

24. (Currently Amended) A <u>computer readable medium storing a</u> program product ~~stored on a recordable medium~~ for selectively indexing source code for sharing over a network, which when executed, comprises:

program code for recognizing at least one programming language of the source code;

<u>program code for analyzing sections of the source code;</u>

program code for indexing relevant portions of the source code based on the at least one programming language<u>, wherein the relevant portions include comments, type names and method names</u>;

program code for recognizing and indexing <u>at least one</u> ~~a graph of~~ source code <u>dependency</u> ~~dependencies~~ corresponding to the source code;

program code for recognizing a <u>set of</u> code type <u>hierarchies</u> ~~hierarchy~~ associated with the source code; and

program code for indexing <u>the</u> ~~a set of~~ code types <u>in the recognized set of</u> ~~from the~~ code type <u>hierarchies</u> ~~hierarchy that is associated with the source code~~; and

wherein the program product operates in an Integrated Development Environment (IDE) which includes classification-based navigation and content dependent searching for code patterns.

25. – 31. (Canceled).

32. (Currently Amended) A system for accessing source code shared over a network, comprising:

at least one computer hardware device;

an Integrated Development Environment (IDE), wherein the IDE includes classification-based navigation and content dependent searching for code patterns;

a context classifier for analyzing working code on the receiving node to identify a context of the working code, and for assigning at least one predetermined category to the working code based on the identified context;

a query generator for querying a directory using the at least one predetermined category assigned to the working code to identify at least one predetermined category assigned to source code that <u>at least one of matches or corresponds to the assigned category</u> ~~is relevant~~ to the working code, <u>wherein the query generator returns a list of categories and selects at least one category from the list of categories</u>;

a code pattern requestor for retrieving the source code from a sharing node in the network to the receiving node based on the at least one ~~predetermined~~ category <u>selected from the list of categories</u> ~~assigned to the source code~~, <u>wherein</u> the <u>retrieving comprises</u> ~~code pattern requestor~~ querying a search engine corresponding to the sharing node to retrieve the source code;

a code pattern classifier for analyzing the source code on the sharing node to identify a set of code patterns, and for assigning the at least one predetermined category to the source code based on the identified set of code patterns, wherein code pattern information that is based on the analysis and assignment is stored in the directory;

a source code indexer for selectively indexing the source code, wherein the source code indexer comprises:

a programming language recognizer for recognizing at least one programming language of the source code and analyzing sections of the source code;

a selective code content indexer for indexing relevant portions of the source code based on the at least one programming language, wherein the relevant portions include comments, type names and method names;

a dependency graph indexer for recognizing and indexing at least one a graph of source code dependency dependencies corresponding to the source code;

a code type hierarchy recognizer for recognizing a set of code type hierarchies hierarchy associated with the source code; and

an associated code type indexer for indexing the a set of code types in the recognized set of from the code type hierarchies hierarchy that is associated with the source code; and

a code sharing notifier for notifying a set of other nodes in the network of the availability of the source code.

33. (Original) The system of claim 32 further comprising a category selector for receiving a response to the query from the directory, wherein the response includes the at least one predetermined category assigned to the source code, and for selecting the at least one predetermined category assigned to the source code.

34.-35. (Canceled).

36. (Currently Amended) A <u>computer readable medium storing a</u> program product ~~stored on a recordable medium~~ for accessing source code shared over a network, which when executed comprising:

program code for analyzing working code on the receiving node to identify a context of the working code, and for assigning at least one predetermined category to the working code based on the identified context;

program code for querying a directory using the at least one predetermined category assigned to the working code to identify at least one predetermined category assigned to source code that <u>at least one of matches or corresponds to the assigned category</u> ~~is relevant~~ to the working code;

<u>program code for returning a list of categories;</u>

<u>program code for selecting at least one category from the list of categories;</u>

program code for retrieving the source code from a sharing node in the network to the receiving node based on the at least one ~~predetermined~~ category <u>selected from the list of categories</u> ~~assigned to the source code~~, <u>wherein</u> the <u>retrieving comprises</u> ~~code pattern requestor~~ querying a search engine corresponding to the sharing node to retrieve the source code;

program code for analyzing the source code on the sharing node to identify a set of code patterns, and for assigning the at least one predetermined category to the source code based on the identified set of code patterns, wherein code pattern information that is based on the analysis and assignment is stored in the directory;

program code for selectively indexing the source code, wherein the program code for selectively indexing comprises:

program code for recognizing at least one programming language of the source code;

program code for analyzing sections of the source code;

program code for indexing relevant portions of the source code based on the at least one programming language, wherein the relevant portions include comments, type names and method names;

program code for recognizing and indexing at least one ~~a graph of~~ source code dependency ~~dependencies~~ corresponding to the source code;

program code for recognizing a set of code type hierarchies ~~hierarchy~~ associated with the source code;

program code for indexing the ~~a set of~~ code types in the recognized set of ~~from the~~ code type hierarchies ~~hierarchy that is associated with the source code~~; and

program code for notifying a set of other nodes in the network of the availability of the source code; and

wherein the program product operates in an Integrated Development Environment (IDE) which includes classification-based navigation and content dependent searching for code patterns.

37. (Original) The program product of claim 36, further comprising program code for receiving a response to the query from the directory, wherein the response includes the at least one predetermined category assigned to the source code, and for selecting the at least one predetermined category assigned to the source code.

38.-39. (Canceled).